

# Metal Finishing Index to Volume 87

## January-December, 1989

In this index, all material that appeared in Metal Finishing during 1989 is listed according to subject matter. A letter will be found following each listing indicating

the category in which the material was published, as follows: (B) Book, (D) Development/New Product, (M) Manufacturers' Literature, (P) Patent, (S) Shop Problem.

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Electroless Nickel (D) . . . . .	Dec/53
Electroless Nickel/Cobalt Bath (P) . .	Dec/58

## Other:

Electroless Plating of Palladium . . . .	Jan/23
Electroless Plating Activator (P) . . . .	Jan/87
Activating a Nonconductor (P) . . . . .	Jan/87
Article Formed by Electroless	
Plating (P) . . . . .	Jan/91
Electroless Plating Process (P) . . . .	Jan/93
Technical Developments in 1988	
Inorganic "Metallic" Finishes,	
Processes and Equipment . . . . .	Feb/17
On-line Electroless Bath Control . . . .	Feb/97
Plating on Polycarbonate (P) . . . . .	Feb/98
Metal Coated Plastic (P) . . . . .	Mar/59
Electroless Gold Bath (P) . . . . .	Apr/54
Plating of Plastic (P) . . . . .	Jun/125
Electroless Gold Bath (P) . . . . .	Jun/126
Electroless Plating Control (P) . . . .	Jun/150
Plating a Nonconductor (P) . . . . .	Jun/151
Electroless Plating Control (P) . . . .	Jun/151
Electroless Bath Control (P) . . . . .	Jun/159
Pretreatment of Polyester for	
Plating (P) . . . . .	Sep/54
Electroless Plating Activator (P) . . . .	Sep/54
Selective Electroless Plating (P) . . . .	Sep/56
Electroless Plating Process (P) . . . .	Sep/58
Specifications for Plated Plastics (S) .	Sep/73
Electroless Gold Bath (P) . . . . .	Oct/77
Electroless Plating Process (P) . . . .	Oct/77
Plateable Plastics (P) . . . . .	Nov/105
Plating on Polyimide (P) . . . . .	Nov/106
Electroless Plating Process (P) . . . .	Nov/108
Plateable Polysulfone Resin (P) . . . .	Nov/131
Method for Electroless Plating (P) . .	Nov/131

## ELECTROPOLISHING

Electropolishing Process (P) . . . . .	Jan/96
Technical Developments in 1988	
Inorganic "Metallic" Finishes,	
Processes and Equipment . . . . .	Feb/17
Effect of Workpiece Orientation on the	
Rate of Electropolishing . . . . .	Feb/69
Electropolishing Process (P) . . . . .	Feb/99
Electropolishing Gold and Silver (S) . .	Mar/74
Electropolishing Disk Package (D) . . .	Mar/79
Electropolishing of High Purity Gas	
Handling Equipment . . . . .	May/38
Electropolishing of Notches (P) . . . .	Jun/148
Electropolishing Large Tanks (S) . . . .	Sep/74

## FILTERS AND STRAINERS

Filter Press (P) . . . . .	Jan/97
Filter Cartridge for Magnetic	
Media Applications (D) . . . . .	Jan/105
Plating Bath Filter (D) . . . . .	Jan/105
Carbon Treatment (D) . . . . .	Jan/109
Bag Filter (M) . . . . .	Jan/113
Basket Strainers and Bag	
Filters (M) . . . . .	Jan/117
Vibrating Liquid Filter (D) . . . . .	Feb/94
Filters, Pumps and Purification	



Equipment (M)	Feb/102
Programmable Trap Filter (D)	Mar/75
Mini Filtration System (D)	Mar/81
Hydrocarbon Vapor-Removing Filter (D)	Mar/81
Filter Gauges (D)	Mar/82
Filter Press Plates (D)	Apr/62
FRP Filter Chamber (D)	Apr/67
Filter Presses (M)	Apr/68
Corrosion Resistant Basket Strainers (M)	Apr/70
Compact Deep Bed Filters (D)	May/57
Bag Filter System (D)	May/61
Combustible Filter Media (D)	May/65
Paint Strainer (P)	Jun/126
New Filter Cover Design (D)	Jun/131
Filter Automation (D)	Jun/138
Mid-Vibrator Filter (D)	Jun/140
Overhead Manifold Air Pressure Feed for Filter Press (D)	Jun/145
Spiral Wound Membrane for Paint Filtration (M)	Jun/168
Plating Tank Filter System (D)	Jul/50
Fiberglass Air Filtration Media (M)	Jul/55
Depth Filter Cartridge (M)	Sep/61
Filtration Manual (M)	Sep/64
Automatic Filter Press (M)	Sep/66
Vibratory Basket Strainer (M)	Sep/71
Filter Press (D)	Sep/75
Replaceable Membrane Depth Filter Cartridge (D)	Sep/80
Filter Media (D)	Sep/83
Sand Filter for Zinc Chloride Plating (M)	Sep/86
Membrane Cartridge (D)	Oct/68
Polishing Filters-A Solution to Wastewater Compliance Problems	Nov/27
Automatic Filter Press (D)	Nov/73
Filter Presses (D)	Nov/73
Metal Finishing Filter System (D)	Nov/76
Plate and Frame Filter Press (D)	Nov/79
Carbon Cartridge For Electronic Applications (D)	Nov/93
Filter Presses (D)	Nov/98
Sand Filter for Acid Plating Solutions (M)	Nov/120
Filter Cartridge (P)	Nov/127
Maintenance and Operations of Filtration Systems	Dec/27
Precoat Filter (D)	Dec/53
Compact Filtration Unit (D)	Dec/54
Dual Function Pump/Filter (D)	Dec/56
Filter Press (M)	Dec/60
Carbon Treatment/Filtration Chambers and Systems (M)	Dec/61
Filtration Video (M)	Dec/61

### FLOORING AND GRATINGS

Acid-Proof Concrete (M)	Feb/100
Polymer Floor Topping (M)	Feb/104
Polyethylene Grid Flooring (D)	Oct/71
Acid Resistant Concrete (M)	Oct/84
Fiberglass Flooring (M)	Nov/113
Gratings and Floorings (M)	Nov/114
Epoxy Flooring Coatings and Sealers (M)	Nov/124
Polymer Floors (M)	Dec/61

### HEATING & COOLING

Blanket Drum Warmer (D)	Jan/106
Heater Purge System (D)	Mar/75
Mini Heat Exchanger (M)	Mar/84
Process Controllers (M)	Mar/85
Immersion Heaters (M)	Apr/70
Electric Over-the-Side Heaters (D)	Jun/135
Small Diameter Tube Burner (D)	Jun/144

Immersion Heaters (M)	Jun/166
Tube Plate Heat Exchanger (M)	Jun/166
Plate and Frame Heat Exchangers (M)	Jul/54
Repairing Damaged Molds (M)	Aug/62
Electric Infrared Process Heaters	Sep/83
Industrial Electric Heat (M)	Oct/84
Plate and Frame Heat Exchanger (D)	Nov/98
Turnkey System for Plastisol and Powder Coating (D)	Dec/54

### HIGH SOLIDS COATINGS

High Solids Coating Composition (P)	Jan/90
High Solids and Waterborne Finishes (D)	Jan/104
High Solids Phenolic Resin (D)	Jan/107
Technical Developments in 1988 Organic Coatings, Processes and Equipment	Feb/43
Low-VOC Primer (D)	Feb/95
High Solids Multilayer Coating (P)	Mar/57
High Solids Coatings (P)	Apr/54
High Solids Acrylic (P)	Jun/148
High Solids Coating (P)	Jun/153
High Solids Coating (P)	Jun/154
High Solids Enamel (P)	Nov/128

### HOT DIPPING

Restoring a Milk Can (S)	Jan/85
Technical Developments in 1988 Inorganic "Metallic" Finishes, Processes and Equipment	Feb/17
Process Combining Hot Dip Galvanizing and Powder Coating (P)	Feb/98
Hot Dipped Workpiece (P)	Mar/72
Hot Dip Galvanized Steel Sheet (P)	Apr/53
Hot Dip Aluminum Coated Chromium Steel (P)	Jun/122
Fluoride-free Flux for Hot Dipping (P)	Jun/122
Hot Dipping Finned Tubes (P)	Jun/156
Hot Dip Process (P)	Aug/65
Hot Dip Alloy (P)	Sep/54
The Influence of Chemical Pretreatment on Zinc Consumption During Hot Dip Galvanizing	Oct/37
Hot Dipping Copper (S)	Dec/51

### LUBRICATION

The New World of Finishing/ Friction and Lubrication	Feb/65
Automatic Lubrication for Chains and Conveyors (M)	Feb/100
The New World of Finishing/ Lubricants—Part I Gases and Liquids	Mar/49
The New World of Finishing/ Lubricants—Part II Plastics and Solids	Apr/11
Monorail Conveyor Lubricator (D)	Apr/64

### MASKS AND STOPS OFFS

Protective Shipping and Masking Devices (M)	Jan/116
Paint Mask (P)	Mar/65
Paint Mask (P)	Mar/67
Masking for Chromic Acid Anodizing (S)	May/55
Protective Masking Applications Guide (M)	May/70
Specialty Tapes and Masks (M)	May/73
Solder Mask (D)	Jun/134
Painting Mask (P)	Nov/106

Coating Fasteners (P)	Nov/110
Pressure Sensitive Tapes (M)	Nov/125

### MASS FINISHING

Small Round Bowl Vibrator (D)	Jan/106
Deburring, Finishing and Parts Cleaning (M)	Jan/115
Technical Developments in 1988 Inorganic "Metallic" Finishes, Processes and Equipment	Feb/17
Deburring Apparatus (P)	Feb/98
Finishing Mills (M)	Mar/86
Compact System for Continuous Finishing (D)	Jun/146
High Energy Mass Finishing (P)	Jun/150
Steel Media (D)	Jul/52
Vibratory Tumbler (D)	Jul/52
Vibratory Finishing Device (P)	Sep/58
Dry Centrifugal Disc Finisher (D)	Sep/78
Vibratory Tumbler for Small Parts (D)	Sep/82
Polycarbonate Deflashing Media (D)	Sep/82
Ceramic Cone Media (D)	Sep/87
Bright Finish for Nitrided Steel (S)	Oct/78
Vibratory Finishing (M)	Oct/83
Ceramic Tumbling Media (D)	Nov/77
Cone Shaped Abrasives (D)	Nov/90
Mini Tumbling Equipment (D)	Nov/93
Steel Finishing Media (P)	Nov/110
Vibratory Finishing (M)	Nov/114
Abrasive Flow Machining (M)	Nov/121
Finishing Equipment and Services (M)	Dec/62

### MECHANICAL PLATING

Technical Developments in 1988 Inorganic "Metallic" Finishes, Processes and Equipment	Feb/17
Mechanical Galvanizing Coating (P)	Feb/99
Mechanically Deposited Aluminum Coating (M)	May/69
Mechanical Plating Process (P)	Jun/122
Mechanical Plating and Mechanical Galvanizing Update	Jul/33
Mechanical Plating Composition (P)	Nov/105

### MEETINGS

NEPCON West '89—Electronic Packaging and Production Conference	Feb/85
PaintCon '89—Coatings Manufacturing and Application	Apr/33
Deburring & Surface Conditioning '89	Apr/75
AESF SUR/FIN '89 Exhibition and Conference	Jun/21
IMF Hosts International Conference in Brighton	Jun/79
AESF Eastern Canada Regional	Aug/69
Cleveland Hosts AESF Sur/Fin '89	Oct/45
SME's Finishing '89 to Take Place in Cincinnati Oct. 16-19	Oct/55
Meeting Wrap-Up/AESF Mid Atlantic Regional	Dec/66

### MISCELLANEOUS

Moving Leaking Drums (D)	Jan/100
Impregnation Resin (D)	Jan/102
Computer Based Control for Compressed Air Dryers (D)	Jan/109
Silanes and Silicones (M)	Jan/113
Sequestering Agents (M)	Jan/114
Hydrogen Embrittlement (S)	Feb/88
Specialty Chemicals (M)	Feb/102
Gold Polish Preparation (P)	Mar/53
Electrolytic Mold Flash Removal (P)	Mar/55

Gold Colored Multilayer (P) . . . . .	Mar/72
Impregnation Resin (M) . . . . .	Mar/84
Compressed Air Systems (M) . . . . .	Mar/85
Corrosion Resistant Fans (M) . . . . .	Mar/86
Handbook of Metal Treatments and Testing (B) . . . . .	Mar/93
Engineering Properties of Zinc Alloys (B) . . . . .	Mar/93
UV Filter Material (D) . . . . .	Apr/62
Chemical Storage (D) . . . . .	Apr/66
Reconditioning Unused Oils and Coolants (M) . . . . .	Apr/68
Coatings to Resist Corrosion (M) . . . . .	Apr/69
Specialty Chemicals (M) . . . . .	Apr/70
The New World of Finishing, Surface Roughness . . . . .	May/47
Galvanic Corrosion Protection (D) . . . . .	May/59
Thermal Deburring Apparatus (P) . . . . .	May/67
Spray Nozzles for the Electroless Industry (M) . . . . .	May/71
Electrochemical Machining (M) . . . . .	May/73
Coating Processes Video (M) . . . . .	May/74
Industrial Markers (M) . . . . .	May/74
1989 AESF Surface Finishing Shop Guide (B) . . . . .	May/76
Electrolytic Finishing System (P) . . . . .	Jun/122
Thermopulse Deburring (P) . . . . .	Jun/125
Deburring Process (D) . . . . .	Jun/144
Static Neutralizing Blow-off Gun (D) . . . . .	Jun/145
Electrochemical Deburring Machine (M) . . . . .	Jun/160
Custom Wire Cloth Parts (M) . . . . .	Jun/160
Industrial Robots and Accessories (M) . . . . .	Jun/161
Abrasive Flow Machining (M) . . . . .	Jun/161
Groundwater Consultants (M) . . . . .	Jun/164
Plating Processes for Electronics and Other Applications (M) . . . . .	Jun/164
Compressed Air Drying Technology (M) . . . . .	Jul/54
Industrial Plastics (M) . . . . .	Jul/55
Restoring Damage on Painted Surfaces (P) . . . . .	Jul/64
Immersion Tin for Bonding Multilayers (P) . . . . .	Jul/64
Transatlantic Letter/The European Community and 1992 . . . . .	Aug/33
Conductive Adhesive Coating for EMI/RFI Shielding (D) . . . . .	Aug/51
Salt Bath Apparatus (P) . . . . .	Aug/66
Thermal Deburring Apparatus (P) . . . . .	Sep/54
Thermal Deburring (P) . . . . .	Sep/59
Abrasive Flow Machining (M) . . . . .	Sep/65
Metal Finishing Chemicals (M) . . . . .	Sep/66
Plastic and Metal Parts for Product Protection (M) . . . . .	Sep/66
Coil Handling Equipment (M) . . . . .	Sep/67
Turnkey Finishing Systems (M) . . . . .	Sep/71
Aluminum-Ceramic Coating (M) . . . . .	Sep/71
The Morphology of Zinc Alloy Immersion Film on Aluminum . . . . .	Oct/49
Static Neutralizing Curtain Transvector (D) . . . . .	Oct/71
High Temperature Ovens and Furnaces (M) . . . . .	Oct/81
Sealing Porous Metal Parts (M) . . . . .	Oct/81
Aerospace Products (M) . . . . .	Oct/82
Oven with Electronic Temperature Control (M) . . . . .	Oct/84
Transatlantic Letter/Superconductivity-The Grand Illusion? . . . . .	Nov/37
Digital Electronic Temperature Indicator (D) . . . . .	Nov/79
Ovens with No Heating Elements (D) . . . . .	Nov/83
Epoxy Resin for Repairing Metal Castings (D) . . . . .	Nov/83
Gas-Fired Shelf Oven (D) . . . . .	Nov/83

Coil Coating with Wood-Like Finish (D) . . . . .	Nov/93
Solvent Evacuate Dryer (D) . . . . .	Nov/103
Metal Finishing Installation Services (M) . . . . .	Nov/120
Chemical Specialties (M) . . . . .	Nov/122
Coatings and Surface Treatment Materials (M) . . . . .	Nov/126
Molten Salt Oxidizing Bath (P) . . . . .	Nov/131

#### PAINT APPLICATION (Except Spray)

Coated Stainless Steel Wire (P) . . . . .	Mar/72
Power Paint Brush (P) . . . . .	Apr/53
Flow Coating Process (P) . . . . .	Apr/55
Plastic Coating Systems (M) . . . . .	May/72
Dripping Paint (S) . . . . .	Jun/129
Dip Coating Pots and Tanks (M) . . . . .	Jun/163
Vacuum Painting Apparatus (P) . . . . .	Sep/58
Coating Fasteners (P) . . . . .	Nov/130

#### PAINT COATINGS

##### Acrylics:

Technical Developments in 1988 Organic Coatings, Processes and Equipment . . . . .	Feb/43
Acrylic Resins (M) . . . . .	Apr/68
Acrylic Coating Composition (P) . . . . .	Aug/65
Acrylic Coating Composition (P) . . . . .	Sep/59

##### Alkyds:

Technical Developments in 1988 Organic Coatings, Processes and Equipment . . . . .	Feb/43
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##### Epoxyes:

Epoxy-Polyester Coating Composition (P) . . . . .	Jan/90
Epoxy Polyester Coating (P) . . . . .	Jan/93
Technical Developments in 1988 Organic Coatings, Processes and Equipment . . . . .	Feb/43
Epoxy-Polyester Coating Composition (P) . . . . .	Feb/99
Abrasion Resistant Epoxy (P) . . . . .	Mar/69
Chip Resistant Coating (P) . . . . .	Mar/69
Chip Resistant Coating (P) . . . . .	Apr/55
Low Temperature Cure Epoxy (P) . . . . .	May/68
Chip Resistant Coating (P) . . . . .	Jun/127
Chip Resistant Coating (P) . . . . .	Jun/148
Epoxy Coating Composition (P) . . . . .	Jun/148
Chip Resistant Coating (P) . . . . .	Jun/153
Epoxy Coating Composition (P) . . . . .	Jun/153
Chip Resistant Coating (P) . . . . .	Jul/64
Texturized Coatings (D) . . . . .	Aug/55
Sprayable Epoxy Resin (D) . . . . .	Nov/102

##### Polyesters:

Technical Developments in 1988 Organic Coatings, Processes and Equipment . . . . .	Feb/43
Polyester Coating Composition (P) . . . . .	Oct/76

##### Polyurethanes:

Synergistic Soling, Cleaning and Weathering Effects on Aircraft Polyurethane Topcoats . . . . .	Jan/37
Primer Coating (P) . . . . .	Jan/93
Technical Developments in 1988 Organic Coatings, Processes and Equipment . . . . .	Feb/43
Primer Composition (P) . . . . .	Mar/54
Urethane Coating System (D) . . . . .	Mar/78
Quick Drying Polyurethane Basecoat (P) . . . . .	Apr/53
Two-Component Polyurethane (P) . . . . .	Apr/55
Isocyanates for Polyurethane Based	

Coatings (M) . . . . .	Jun/164
Texturized Coatings (D) . . . . .	Aug/55
Isocyanate-free Paint (D) . . . . .	Oct/68
Two-Component Polyurethane (D) . . . . .	Nov/100
Primer Composition (P) . . . . .	Nov/106

#### Vinyls:

Technical Developments in 1988 Organic Coatings, Processes and Equipment . . . . .	Feb/43
Coating Composition (P) . . . . .	Mar/71
Coating to Simulate Anodized Aluminum (P) . . . . .	May/67

#### Other:

Aluminum Primer (D) . . . . .	Jan/100
Technical Developments in 1988 Organic Coatings, Processes and Equipment . . . . .	Feb/43
Transatlantic Letter/The Graffiti Industry . . . . .	Feb/63
EMI Shielding Paint (P) . . . . .	Feb/97
High Temperature Resistant Coatings (M) . . . . .	Feb/104
Radiation Curable Compositions (P) . . . . .	Mar/53
Nonyellowing Coating Composition (P) . . . . .	May/68
Basecoat/Clearcoat (P) . . . . .	May/68
Conductive Fillers for EMI/RFI Shielding Coatings . . . . .	Jun/67
Low-Bake Texture Enamel (D) . . . . .	Jun/131
Fluorocarbon Coating Composition (P) . . . . .	Jun/147
Multilayer Coating Process (P) . . . . .	Jun/156
Metallic/Clear Coat System (P) . . . . .	Sep/54
Conductive Coating for EMI Shielding (P) . . . . .	Sep/60
Military Specification Paints (M) . . . . .	Sep/63
Paints Specification Guide (M) . . . . .	Sep/66
Rust Preventive Coating (M) . . . . .	Sep/79
Custom Coatings (M) . . . . .	Oct/83

#### PAINT CURING

Curing Tunnel (P) . . . . .	Jan/87
Spray Booth Apparatus (P) . . . . .	Jan/95
Automotive Coating Curing System (P) . . . . .	Jan/97
Gas Fired Baking Oven (D) . . . . .	Jan/100
Technical Developments in 1988 Organic Coatings, Processes and Equipment . . . . .	Feb/43
Gas Fired Infrared Boosters for Ovens and Dryers (D) . . . . .	Apr/63
Ceramic-Type Electric Infrared Heat Generators (D) . . . . .	Jun/134
UV Curing (D) . . . . .	Jun/140
UV Curing (M) . . . . .	Sep/61
Sensor for Coil Coating Ovens (D) . . . . .	Sep/79
UV Spot Curing System (D) . . . . .	Sep/81
Wide Web UV Curing System (D) . . . . .	Oct/75
Ovens for Batch and Conveyorized Processes (M) . . . . .	Oct/81
Oven Temperature Recording System (D) . . . . .	Nov/82
Infrared Emitter (D) . . . . .	Nov/86
Conveyorized Ovens (M) . . . . .	Nov/116

#### PEOPLE IN FINISHING

Good Days & Bad Days in the Finishing Shop/People in Finishing Part—X Alphabet Soup Party . . . . .	Jan/29
Good Days & Bad Days in the Finishing Shop/People in Finishing Part—Y Gas Company Account Executive . . . . .	Feb/77
Good Days & Bad Days in the Finishing Shop/People in Finishing Part—Z Plant Superintendent . . . . .	Mar/13

Good Days & Bad Days in the Finishing Shop/People in Finishing Part—AA	Electric Company Representative	Apr/37
Good Days & Bad Days in the Finishing Shop/People in Finishing Part—BB	Labor Lawyer	May/21
Good Days & Bad Days in the Finishing Shop/People in Finishing Part—CC	Editorial Director	Jun/83
Good Days & Bad Days in the Finishing Shop/People in Finishing Part—DD	Contract Platers	Jul/43
Good Days & Bad Days in the Finishing Shop/People in Finishing Part—EE	Engineering Platers	Aug/41
Good Days & Bad Days in the Finishing Shop/People in Finishing Part—FF	Technical Sales Person	Sep/27
Good Days & Bad Days in the Finishing Shop/People in Finishing Part—GG	Quality Auditor	Oct/29
Good Days & Bad Days in the Finishing Shop/People in Finishing Part—HH	Real Estate Broker	Nov/23
Good Days & Bad Days in the Finishing Shop/People in Finishing Part—JJ	Initials Dictionary	Dec/13

## PHOSPHATING

Phosphating Activator (P)	Jan/95
Phosphating Processes (S)	Feb/87
Zinc Phosphate (P)	Feb/97
Phosphating Composition (P)	Feb/98
Phosphate Coating Composition (P)	Apr/55
Zinc Phosphate (D)	Jun/140
Iron Phosphate (P)	Jun/149
Phosphate Coatings (M)	Jul/54
The New Age in Pretreatment	Aug/24
Preventing Problems in Five-Stage Zinc Phosphate Spray Systems	Aug/37
Iron Phosphate (M)	Aug/63
Phosphating Composition (P)	Sep/57
Chromium Phosphate for Aluminum	Oct/41
Phosphate for Galvanized Metal (P)	Nov/128
Nozzle Maintenance for Spraying Equipment	Dec/21
Phosphating Activator (P)	Dec/59

## PICKLING, ETCHING & DESCALING

Passivating Stainless (S)	Jan/85
Etching Aluminum (S)	Jan/86
Plating Nickel on Stainless Steel (P)	Jan/87
Etch Control (P)	Jan/89
Copper Etching Process (P)	Jan/91
Automatic Etcher (P)	Jan/95
Method for Etching Copper (P)	Jan/96
Hydrochloric Acid Handbook (M)	Jan/113
Technical Developments in 1988	
Inorganic "Metallic" Finishes, Processes and Equipment	Feb/17
Etching 6063 Aluminum (S)	Feb/87
Etching Machine (P)	Feb/97
Acid Cleaner (P)	Mar/54
Dry Etching Apparatus (P)	Mar/54
Copper Etchant (P)	Mar/60
Electrochemical Graining of Aluminum (P)	Mar/62
Plasma Etcher Cleaning (P)	Mar/63
Plasma Etching of Tungsten (P)	Mar/66
Dry Etching Process (P)	Mar/66
Intermittent Etching Process (P)	Mar/72
Desmutting Cast Iron (S)	Mar/74
Aluminum Etch (P)	Apr/55
Bright Dip for Cast Iron (S)	Apr/59
Removing Heat Treat Scale (S)	Apr/60
Etching Composition (P)	May/67
Dry Etching of Aluminum (P)	May/68

Etch for Uranium-Titanium Alloy (P)	Jun/126
Metallizing Activator Composition (P)	Jun/147
Plasma Desmearing and Plating of Through Holes (P)	Jun/148
Etching Apparatus (P)	Jun/148
Improving Paint Adhesion to Polyurethane (P)	Jun/149
Etch Monitor (P)	Jun/151
Rust Removal Composition (P)	Jun/151
Plating Ceramics (P)	Jun/154
Chemical Polishing System (M)	Jun/163
Bright Dipping (S)	Aug/49
Pickling System (M)	Aug/61
Plastic Etching Process (P)	Aug/66
Low Contamination RF Sputtering Device (P)	Sep/54
Graining Aluminum Plates (P)	Sep/57
Steel Pickling Process (M)	Sep/70
Pickling Inhibitors (S)	Oct/78
Activator for Silver Cadmium Oxide (S)	Nov/68
Pattern Plate Activation Process (D)	Nov/77
Pickle Additive (M)	Nov/121
Electrolytic-Abrasive Method for Polishing Aluminum (P)	Nov/128
Electrolytic Etching of Aluminum (P)	Nov/129
Plasma Desmear (P)	Nov/130
Bright Silver (S)	Dec/51

## PLATING METHODS & EQUIPMENT

An Automated Plating System Based Upon Vibratory Technology	Jan/15
"Touchscreen" Computer Control System for Automatic Processing Line (D)	Feb/92
Automatic Plating and Processing Machines (D)	Feb/93
Electroplating Apparatus (P)	Feb/99
Automated Surface Finishing Equipment (M)	Feb/101
Process for Deposition on Plate Shapes (P)	Mar/58
Electroplated Steel Wires (P)	Mar/61
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Electroplated Tape (P)	Jun/150
Method for Producing Isotopes (P)	Jun/150
A Progress Report on Pulse Plating	Sep/46
Disk Plating System (P)	Sep/54
Composite Plating of Abrasive Materials (P)	Sep/59
Plating and Processing Equipment (M)	Sep/69
Plating Equipment Supplies (M)	Sep/70
Electroplating Apparatus (P)	Nov/105
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Electroplating Metal Bars (P)	Nov/130

## POLISHING & BUFFING

Polishing Memory Discs (P)	Jan/92
Polishing Apparatus (P)	Jan/96
Technical Developments in 1988	
Inorganic "Metallic" Finishes, Processes and Equipment	Feb/17
Buffing Compound (D)	Feb/92
Abrasive Specialties (D)	Feb/95
Liquid Buffing Compound Spray Gun (D)	Feb/95
Coated Abrasive (P)	Feb/97
Coated Abrasives (M)	Feb/100
Contact Wheels (M)	Feb/103
Nonabrasive Finishing Media (M)	Feb/103
Deburring Machines (M)	Feb/103
Polishing Slurries (M)	Feb/103
Polishing Apparatus (P)	Mar/54

Polishing Composition (P)	Mar/61
Buffing Pad Cleaning (P)	Mar/63
Nonwoven Abrasives (D)	Mar/75
Abrasive Belt Grinder (D)	Mar/79
Abrasive Flap Wheels (D)	Mar/80
Air-Powered Finishing Tool (D)	May/65
Abrasive Belt Grinder (D)	May/66
Micro-abrasive Finishing Device (P)	May/67
Deburring Apparatus (P)	May/67
Abrasive Disc Support (P)	May/67
Surface Finishing System (M)	May/70
External Honing (M)	May/70
Seneca Tripoli (M)	May/71
Buffing Wheels and Compounds (M)	Jun/164
Polishing Process (M)	Jun/166
Lapping and Polishing (M)	Jun/166
Abrasive Products (M)	Jun/166
Belt Grinders and Polishers (M)	Jun/167
New Flexible Abrasive Finishing Tools Solve Old Problems in Mechanical Finishing	Jul/39
Computer Integrated Finishing (M)	Jul/54
Belted Products for Abrasive Cleaning (M)	Jul/55
Buffing Wheel (P)	Jul/64
Refinishing Magnesium Wheels (S)	Aug/49
Cutting Tool Wheel (P)	Sep/58
Flexible Deburring System (M)	Sep/63
Polishing Products (M)	Sep/67
Five-Axis Robotic Finishing System (D)	Sep/77
Automated Component Finishing (D)	Sep/80
Polishing Agents for Nonferrous Metals (D)	Sep/81
Long Trim Wheels for Automated Deburring (D)	Oct/74
Coated Abrasive (P)	Oct/76
Surface Preparation and Finishing Products (M)	Oct/83
Grinder/Polisher (D)	Nov/90
Abrasive Brush Tools (D)	Nov/91
Interleafed Flap Wheel (D)	Nov/100
Deburring and Finishing Wheels (D)	Nov/102
Abrasive Sheet (P)	Nov/106
Coated Abrasive (P)	Nov/108
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Integrated Finishing and Manufacturing Workcells (M)	Nov/117
Bufs and Polishing Wheels (M)	Nov/125
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## POWDER COATING

Powder Coating Booth Cleaning (P)	Jan/87
PVDF Powder Coatings (P)	Jan/93
Powder Spraying System (P)	Jan/95
Powder Coating Booth (P)	Jan/96
Powder Coating of Tubing (P)	Jan/96
Powder Spray Booth (D)	Jan/101
Technical Developments in 1988	
Organic Coatings, Processes and Equipment	Feb/43
Powder Coating Device (P)	Feb/97
Powder Coating Method (P)	Feb/97
Powder Spray Gun (P)	Feb/98
Process Combining Hot Dip Galvanizing and Powder Coating (P)	Feb/98
Powder Charging Method (P)	Mar/54
Powder Coating Device (P)	Mar/54
Polyurethane Powder Coating (P)	Mar/57
Powder Spray Gun (P)	Mar/59
Powder Coating Composition (P)	Mar/63
Powder Coating Booth (P)	Mar/66
Epoxy Powder Coating (P)	Mar/67
Powder Spray Apparatus (P)	Mar/68



Powder Painting Gun Head (P) . . . .	Mar/72
Developments in Powder Coating Technology . . . . .	Apr/41
Powder Coating Apparatus (P) . . . .	Apr/55
Powder Coating System for Pipe Threads (D) . . . . .	Apr/64
Powder Coating Overspray Collector (D) . . . . .	May/65
Powder Recovery System (P) . . . . .	May/67
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Powder Coatings (M) . . . . .	May/72
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Powder Coating Pipe Joints (P) . . . .	Aug/65
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Powder Coating Composition (P) . . . .	Sep/54
Powder Recovery System (D) . . . . .	Sep/78
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DC Plating Power Supply (M) . . . . .	Oct/81
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Pretreatment of Through Holes (P) . .	Mar/56
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Metalizing Through Holes (P) . . . . .	Mar/67
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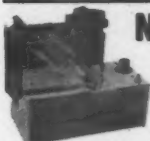
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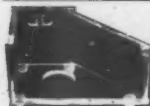


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